

Design Deliverables for Stormwater Facility Grants



Design Deliverables for Stormwater Projects with Ecology Funding

This document details Ecology's expectations of deliverables for Ecology funded stormwater projects.

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Douglas C. Howie, P.E. July 14, 2021

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Nonpoint source project resources

Facility project resources

General resources for water quality grants & loans

We offer helpful resources if you are seeking support for — or information about — water quality projects funded by us.

The following resources apply to all Water Quality grant and/or loan funded projects. Some additional resources, depending on your project type and funding type, are also available at these two links:

- Nonpoint Project Resources (Centennial/Section 319/CWSRF)
- Facility Project Resources (CWSRF/Centennial/Stormwater Financial Assistance grant)

Training opportunities and materials

Funding recipient training and materials

Funding applicant training

+



Forms

This section contains forms used for submitting payment requests and progress reports, closeout reports, and agreement materials for Stormwater projects:

Forms and materials

Closeout report templates

In addition to the EAGL Recipient Closeout Report, recipients must complete a two-page Outcome Summary, templates below:

- Outcome Summary Use for nonpoint projects (updated October 31, 2019)
- Wastewater facility planning and design projects' Outcome Summary form
- Wastewater facility construction projects' Outcomes Summary Form
- · Stormwater activity projects 2-Page Summary form
 - Guidance
- · Stormwater facility projects 2-Page Summary form
 - Guidance

Stormwater projects' agreement materials

- Stormwater Construction Completion Form
- <u>Design Deliverable for Stormwater Projects</u>
- Design Deliverables Checklist
- Stormwater Grant Program Bid Specification Clause
- · Stormwater Grant Program Bid Insert
- Stormwater activity projects Recipient Closeout Report form
- Stormwater facility projects Recipient Closeout Report form



Deliverables Reviewed by Ecology

Design Report

90% Design Package

Bid Documents

Construction Quality Assurance Plan (CQAP)

Operations and Maintenance Plan



Design Report Review

Expected base level of work

Acceptance vs Approval Ecology Review timing

Acceptance Letter



Design Report Review Focus

Meets Requirements of Manual(s)

Matches project described in Application

Minimum Requirement/Core Element Determination

BMP selection and sizing

Equivalent Area Calculation

Eligible/Ineligible Costs



Design Report Contents

Basin and Project Description

Minimum Requirements/Core Element Analysis

Alternatives

Design Analysis and calculations

Water Quality Benefit Calculation

Opinion of Construction Cost

Schedule

Drawings



90% Design Package

- Expected base level of work
- Submittal Package
 - Construction Plans
 - Construction Specifications
 - No need to fill in dates
 - Include Ecology Inserts
 - Opinion of Construction Cost
 - Construction Schedule
 - Revised Water Quality Benefit Calculation



Bid Documents

- Ready to go out to bid next day
- Submittal Package (Not necessarily stamped)
 - Construction Plans
 - Construction Specifications
 - Opinion of Construction Cost
 - Construction Schedule
 - Revised Water Quality Benefit Calculation



Construction Quality Assurance Plan (CQAP)

SWPPP

Field Testing

Change Orders

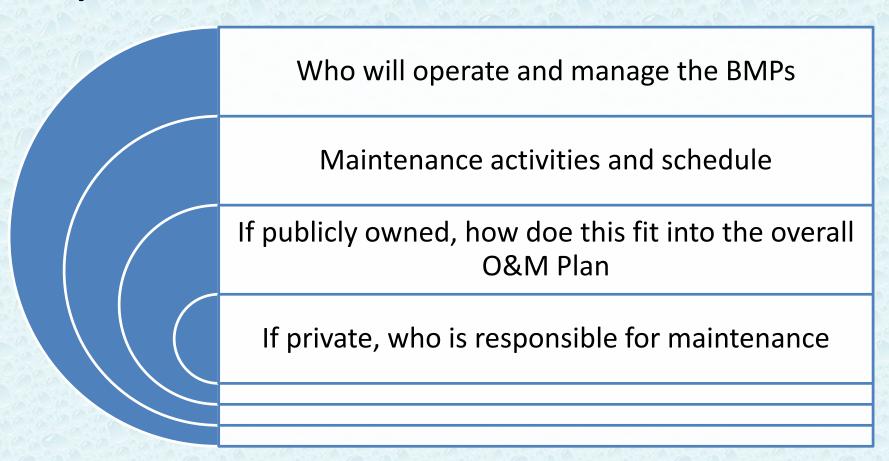
Submittal Reviews

Quality Control

Permits



Operations and Maintenance Plan





Water Quality Benefit Calculation

- Ecology needs to report how funds are used
- Standard for Comparison: How does retrofit work compared to what would be required for New Development?
- Get credit for portion of basin based on size of new installed BMPs.



Questions?



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